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LECTURES.

RINGWORM: *TINEA TRICHOPHYTINA*.

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GENTLEMEN, — I show you this morning a mother and four young children who have upon different parts of their bodies a form of eruption which is of not infrequent occurrence among us, and which is remarkable for the diversities of appearance it presents, according to its seat and stage. You will see upon all of them, situated upon the face, neck, fore-arms, and backs of the hands, small, circular red patches, varying in size from a small pea to that of a silver half-dollar. The redness disappears momentarily on pressure, indicating an inflammatory or hyperæmic state of the skin. If examined more closely, we find that the patches are but slightly elevated above the general surface, and, on pinching up the skin, that the tissues beneath them are not infiltrated. Their surface-manifestations consist of scattered, small, papular elevations, which are most pronounced at the edge of the patch, and of thin, minute scales which sparsely cover both the papules and the generally reddened, affected portions of the integument. Some of the papules may possibly be found to have become vesicular in character (from which the disease received its old name, *herpes circinatus*), but it is rare that the efflorescence proceeds to this grade of evolution. If we examine the larger, and therefore older, patches we find that the central portions are much less red and prominent, and present only a slight scaliness on a dull red or yellow surface. The border of these, moreover, is not so uniformly papular or defined by so great prominence as in the smaller ones. This indicates that the process quickly reaches its height, and tends to spontaneous though incomplete subsidence. You will see that this brief description applies to all the many patches the five patients present, and that, with the exception of the slight changes consequent upon the natural subsidence of the process in the centres of the patches, there is, in apparent opposition to the remark first made, a marked uniformity in the appearances of the affection. If, however, we examine the scalps of two of these children we find also circular patches, from one half inch to an inch in diameter, which differ from

those upon the other parts of the body. They are scarcely at all red, and present no well-defined papules nor prominent edges ; they are, on the other hand, more scaly than the others. As these patches are of the same nature as the latter, these differences in appearance must be due to differences in the anatomy of the scalp and the general integument, the former showing itself less disposed to inflammatory reaction under the common exciting cause. The scales, too, upon the scalp are somewhat thicker than upon the general surface, because they are retained in place by the hair in part, and because the head is less frequently washed. The hair is somewhat thinner over these places than elsewhere. The subjective symptoms in all the patches are a slight burning and itching. The general condition of the patients is in no way changed from that of health ; they are a particularly healthy family.

What now can be the nature of an affection which attacks so many members of a household at the same time ? We should naturally think first of the epidemic and contagious exanthemata, but I need not recall the cutaneous manifestations of these diseases to convince you that in the seat and character of the lesions here seen these cases in no way resemble this class ; moreover, the entire absence of all constitutional symptoms here indicates their different nature. But, on the other hand, we have strong presumptive evidence that the disease is due either to some local infectious cause, such as probably, in my opinion, gives rise to so-called impetigo contagiosa, or that it is contagious. In this case, as its history teaches, there is no proof that it has been communicated from one member to another, for we shall find, on questioning the mother, that the disease began to show itself nearly simultaneously upon the whole family, excepting the father, ten days ago, in the form of small spots, which have in the mean time grown to the largest of these patches, while new ones have been appearing constantly since then. Taking this history with the appearances, there should remain but little doubt as to the nature of the disease, but we shall make the diagnosis absolutely sure by scraping off some of the scales and examining them by a high magnifying power. Having first made them more transparent by adding a drop of liquor potassæ, we find that they consist of epithelial cells, with certain minute foreign elements which we recognize as belonging to cryptogamic growths. Their shape and size, moreover, show them to be the spores and mycelium of a fungus called *trichophyton tonsurans* ; but as we know nothing of other phases of this plant, that is, nothing of its real botanical relations, we must understand by this name only the parasitic and incomplete stage of some unknown mould or fungus. This phase, however, is always well defined and unvarying, and is always present in this affection. We conclude therefore, justly, that the fungus is the cause of the disease, and we can easily demonstrate that it is so by inoculation. Indeed, in the majority of cases the history of its contagious nature is clear in its communication from one portion of the cu-

taneous surface to another in succession, or from one member of a family to others. In this instance, however, you will remember that I stated that there was no evidence that it was thus communicated from one member to the other, because it began almost simultaneously upon all of them.

What, then, was the source of contagion? This growth is found not upon man alone, but upon several of the domestic animals, as dogs, cats, and horses, producing upon them appearances resembling those upon the scalp above mentioned, and constituting one of the forms of affection popularly called mange. It is always important, therefore, to bear in mind the possibility of contagion from these sources, especially if several members of a family are affected simultaneously. In this case inquiry was immediately directed to this point, and it was ascertained that a kitten recently received into the household had spots of some kind upon it. I have asked the patients to bring the animal this morning, and it is in this basket. On examination we see that upon the ears near their base there are some circular patches lighter in color than the surrounding parts, and that these appearances are produced by a loss of a part of the hairs. The surface of the skin thus affected is slightly scaly, but exhibits no signs of inflammation. Although I have not seen the kitten before, and therefore have had no opportunity to examine for the presence of the fungus, I have no doubt that we should find upon the surface of the patches, and probably also in the hairs growing from them, the identical cryptogamic growths found upon the children and their mother. You will readily understand how a kitten thus affected, received into a family and brought into repeated and intimate contact with the hands and heads of the children in fondling it, might and must communicate an affection so eminently contagious as ringworm. You will see, too, why the disease is limited in its early stage to its present localities, because it has not yet had time to spread to any great extent by self-inoculation, and yet why it starts from so many centres at once within these affected regions. That the father of the family alone remains unaffected is explained by the fact that he has not handled the kitten like the others. Such cases of communication from animals to man are not very rare. I was able to show the class a year ago a similar instance; the father, mother, and three children presented great numbers of small ringworms upon the faces, necks, and arms, which had appeared a week after two kittens affected like this one had been brought into the family.¹ Last summer a groom presented himself for

¹ During the preparation of this lecture for publication I have been asked in consultation to see an unusual looking eruption upon a family of children in this city. Four of the five children were thickly covered with small ringworms upon the hands, arms, faces, and necks. After inquiry, it was ascertained that a strange kitten had been taken in from the street within ten days. On examination it was found that there were several patches of the same growth upon its head. All the children excepting the girl not affected had handled it freely.

treatment at the clinic with a large ringworm upon the fore-arms, and stated that there were upon his horse circular patches which he described as closely resembling the disease upon that animal.

I have spoken of the cases before us as representing the first or early stage of the disease. You have also had the opportunity of seeing its later stages in various forms. Upon the general surface the appearances are always nearly the same, excepting in the size of the rings, which of course may increase according to their duration ; but upon three portions of the body marked variations from this early type occur, if the disease remain long uncured, or is imperfectly treated. These are the scalp, the bearded face, and the genital regions.

Upon the scalp, if we should leave the patches upon either of these children to run their own course, we should shortly find the hair falling wholly from the affected parts and leaving circular bald spots ; but as circular patches of baldness are found in other affections, it becomes necessary to specify what are the distinguishing marks of ringworm of the scalp in this respect. Examining the surfaces of the apparently bald spots, you will see that the hairs have not generally fallen out, but have broken off just above the scalp, leaving their stumps to project and to give, with the scaliness of the early stage, now much more apparent, a peculiar roughness, which is increased by a marked prominence of the hair follicles. In alopecia circumscripta, which resembles tinea tonsurans in size and configuration, the surface of the patches is perfectly smooth, free from scales, and almost wholly devoid of hair stumps. At the borders of these patches, upon our patients, among the hairs not yet fallen, a rim of slight scaliness may be seen, where the early stage of the affection is in progress. There is seldom any redness or other sign of severe inflammation in ordinary cases, but occasionally deep-seated inflammation of the hair follicles, with swelling and prominence of the skin, arises. A viscid fluid is discharged from several openings, and the whole elevated patch feels boggy. This condition is called kerion. The course of the disease, after it has attained the second stage, is always chronic ; indeed, it may last for years, and may extend over large portions of the scalp, so that it is almost completely denuded of hair during its activity. Permanent baldness, however, seldom ensues, whatever the duration of the affection, unless the inflammation should be so exceptionally severe in parts as to destroy the hair follicles. Such destruction, the result of small abscesses, is always very limited, and occurs mostly in children of strumous or debilitated habit. The absence of moisture or crusts in ringworm serves to distinguish it from eczema or favus, which, with seborrhœa, are the most common diseases of the scalp in youth. From the latter, or other scaly affections of the part, the circumscribed baldness would be generally sufficient for differential diagnosis. If we pull out some of the stumps of hair from

the affected parts, and they generally come away so easily as to be scarcely felt by the patient, and examine them by the microscope after adding a drop of potash solution, we find the same cryptogamic growths between the sheaths, often in great quantity, and running in parallel bead-like rows between the elongated cell-structure of the root and shaft. You will readily see why a hair thus permeated by such foreign growth should become brittle and break off with a splintered fracture just above or below the surface of the scalp. You will notice, too, that the first stage of the affection becomes the second only after the fungus has had time to extend its growth down into the hair sacs and throughout the capillary tissues. For reasons not well understood, this form seldom affects adults, although ringworm of the face in men is here not an uncommon affection, thus affording prolonged chances of its transference to the scalp. With children, however, it is not an infrequent occurrence, especially in asylums, where the most favorable opportunities for contagion prevail in the common use of brushes, combs, and towels, and where, if once introduced, it may affect a large part of the inmates, and require years for its eradication.

I have shown you thus far in the course several men with disease of the bearded parts of the face, and have told you that such cases were popularly called barber's itch, because they are commonly believed to be acquired at a barber's shop. I have told you, however, that there are three distinct affections thus called, of which we have seen examples: eczema of the hairy face, acne of the beard, and a parasitic folliculitis of the same parts. They are apt to be confounded, even by physicians, under the common name sycosis. One of them only, the latter, is contagious, and may be contracted at the barber's shop; it is ringworm in its late stages. The disease always begins in the circinate or superficial form as upon other parts of the body, the circular patches or rings already described, which may extend rapidly and cover large portions of the face and neck. It may exist in this stage for weeks, or months even, without subsequent changes, with or without treatment, or may for a long time escape recognition, owing to its partial concealment by the beard. It rarely affects men who wear a full beard, or those who shave themselves, because it is almost always contracted at the barber's. No precautions in the way of having separate shaving equipments at these places will insure absolute safety against such chances. Razors are rubbed upon a common strop; towels are used upon several persons in succession; and I have treated ringworm upon the hands of barbers. In such ways the minute germs of the disease may be transferred from one affected individual to many, who think themselves fully protected against the dangers of the barber's shop. Sometimes, however, the disease is brought into the family by the children, or by domestic animals as just seen, and may thus establish its

seat upon the bearded or shaven face of the father. After an indefinite period, varying from a few weeks to many months, it may be after the primary or circinate manifestations have disappeared under treatment, the spores find their way in many cases to the depths of the hair follicles, and the second stage, parasitic folliculitis or sycosis, is developed. This is a most distressing and obstinate affection. It begins in the form of small nodules about the hairs, in some portion of the skin previously run over by the disease. These slowly enlarge and may discharge pus from their tips, which dries and forms crusts about the hair. In later stages the nodules and pustules may be converted into large, prominent tubercles, which by suppuration may give rise to thick crusts, or large, raw surfaces may be established. The tissues of the skin surrounding the diseased follicles may become involved to a great depth, causing extensive induration, swelling, and disfigurement of the parts. The disease may thus progress gradually over the hairy portions of the face for months and years, producing, if the folliculitis is excessive, permanent destruction of the hair growth. How, now, shall we distinguish this form of sycosis from the non-parasitic folliculitis and from eczema of the same parts? From the former it may not always be easily distinguished at sight; generally, however, the morphological changes are much more grave in the parasitic form; its clinical history, moreover, will almost always establish the fact of a preëxistent ringworm; and the microscopic examination of the hairs removed from the follicles least inflamed will discover the presence of the fungus-growth identical with that of the early stages or circinate form. In eczema of the bearded face the inflammation is not limited at first to the tissues immediately surrounding the follicles, and the serous oozing, suppuration, and crust formation are not centred about individual hairs, but affect the surface involved uniformly. The infiltration of the tissues, too, is more general and diffused, not nodular. Parasitic sycosis seems to be far more common here than in some other parts of the civilized world, Germany especially, the cause of which is readily seen on examining the relative occurrence of all forms of the disease here and in other countries. In dispensary and hospital practice it forms in America 3.46 per cent. of all affections of the skin; in Ireland, 1.7 per cent.; in Scotland, 1.4 per cent.; and in Austria only .33 per cent. In my private practice here in Boston it makes 5.6 per cent., while in Mr. Wilson's in London it makes only 2.5 per cent. You see, therefore, why with this special luxuriance of parasitic growth of the plant amongst us its frequent occurrence upon the bearded face is not at all strange.¹ . . .

In considering the clinical features of all these varieties of ringworm we have seen that the sources of contagion are various. Of the natural habitat of the plant, outside its parasitic life upon animals, I have stated

¹ Remarks upon eczema marginatum of Hebra, Burmese ringworm, omitted.

that we know nothing. It is probable, from its more frequent occurrence upon man in America, that in its other phase of existence it is also more abundant amongst us than elsewhere, for our habits of life and of the toilet are less favorable to the development of such extraneous growths upon us than are those of European nations. Certainly instances often occur where we cannot trace the immediate source of contagion from another individual directly. In the majority of cases, however, we are able to do so. In children, ordinary circinate ringworm, occurring most commonly upon the hands and arms, face and neck, is generally taken by playing with other children similarly affected; whereas the form upon the scalp is often taken by putting on the cap, or using the brush and comb of another child thus affected. The obstinacy and long duration of this latter variety offer protracted chances of such communication. Upon adults in the form of sycosis it is almost always contracted at the barber's shop by shaving in ways already alluded to, rarely at shops where only hair-dressing is done. The marginate forms about the genitals may possibly be conveyed during impure sexual intercourse. All forms, however, are intercommunicable. Thus, a child getting a simple ringworm at school may be the source of *tinea tonsurans* upon its own head or the scalps of others of the household, and of parasitic sycosis upon the father; or the latter may bring it from the barber's shop and distribute it in turn among the family in several varieties. I have known young gentlemen to communicate it in this way to the faces of their affianced in several instances. I have also known a man to bear the disease in his nails, an occasional seat, for many years, and finally to produce from it a *tinea tonsurans* upon the head of his granddaughter. Lastly, the occurrence of the plant upon domestic animals, the cat, dog, ox, and horse, as a not infrequent source of contagion, is to be borne in mind. There is no reason for supposing any peculiar condition of the skin to be necessary for the development of the disease. There is no doubt a difference, according to individual cutaneous temperament and the general state of the economy, in the reaction of the skin under the parasitic irritation and in the secondary manifestations, but nothing more than I have observed. The case before us shows with what impartiality the plant attaches itself to all who come in contact with it.

The nomenclature of this affection is still in a state of confusion. *Herpes circinatus*, *herpes tonsurans*, *sycosis parasitica*, *eczema marginatum*, and several other distinct titles are used to designate what we have seen to be only various localized forms and stages of the same disease. It is important that we should use but one common generic name for all the vegetable parasitic affections, such as *tinea* or *mycosis*. We should then have for that which we are considering, in all its forms, *tinea trichophytina*. Nor is it desirable to use for the local varieties dis-

tinct titles, as if they were in any way separate affections, as *tinea circinata* for the general surface, *tinea tonsurans* for the scalp; and *tinea sycosis* for the beard, for the one may become the other at any time upon the same host. It would be better to speak of them as the circinate form, etc., of *tinea trichophytina*.

Treatment. — In discussing the treatment of all vegetable parasitic affections of the skin we must consider what we have really to do. We have certain changes in the cutaneous tissues and appendages, which are secondary, and with them there is a foreign vegetable growth. If we destroy the latter, the former will generally disappear at once. The problem, therefore, is to bring in direct contact with the fungus such substances as will kill it and yet not injure the skin. Unfortunately, those which act most rapidly upon the plant cannot be used for a considerable time without danger of irritating the skin, and if they be used to this degree the products of inflammation poured out upon the surface will protect the plant against the farther action of the remedy, or the inflammation may be so severe that it must be suspended for a time. Now it is necessary in some forms of the disease that the remedies should be employed for long periods, for in no other way can they be made to come in contact with the fungus. In the ordinary circinate or ringworm stage upon non-hairy portions of the body the growth of the plant is quite superficial, and very simple agents are often sufficient to work an immediate cure; such popular remedies as gunpowder and vinegar, vinegar in which a cent has been soaked, tincture of iodine, etc., when applied to the parts are often effective. It is in such cases that the milder class of remedies commonly used by physicians, if thoroughly employed, are all-sufficient for the cure. Among these are acetic acid, carbolic acid in various forms, iodine, solutions of sulphurous acid, preparations of tar, etc. The danger in relying upon them is that the disease appears to be well before the growth in the lower layers of the epidermis is destroyed. Treatment is therefore stopped, and relapses follow. Such imperfect treatment of the first stage of ringworm by the physician is a frequent cause of the more serious forms of the disease. Generally speaking, it is necessary to continue treatment of the simple circinate variety long after all traces of the disease have disappeared. I am in the habit of telling patients that they must treat the disease the last half of the time by memory. When it affects hairy parts, as the scalp or beard, the time required for a cure is always much longer, and is certainly a matter of months, sometimes of many months. We have seen that the plant after a time extends to the very base of the hair follicles in these parts, that is to the extreme depths of the skin. It is necessary, therefore, to make our parasitocides penetrate to these depths, else they will not come in contact with the growth nor destroy it. Now not only are the spores within the follicles protected from such action

by the presence of the hairs, but these are themselves filled with the cryptogamic growth. It is evident, therefore, that if we pull out the affected hairs, we not only remove a part of the disease at once, but also open the hair sacs to the entrance of our remedies. Epilation, then, must be regarded as a necessity when the disease affects the beard or scalp. I do not mean to say that some cases may not recover without resorting to it, but that the cure is vastly more uncertain and protracted. Not only the stumps within the affected districts, but the hairs immediately surrounding and not yet showing signs of disease should be removed. They are easily extracted by a broad-bladed forceps, and should be burned as soon as pulled. There is, of course, no danger of permanent baldness from such pulling, and the new growth which follows has to be removed in some cases a second time. As many hairs should be extracted as possible at one sitting without producing too much irritation in any one portion of the diseased patch. The choice of parasiticides must depend in some degree upon the seat, extent, and surface condition in individual cases. Where the accompanying eczematous inflammation is especially severe, as in Hebra's eczema marginatum and in some cases of sycosis, or where the deeper-seated inflammation of the latter form is intense, it is sometimes necessary to employ a preliminary treatment for the reduction of such inflammatory conditions before the proper antiparasitic remedies can be used. The form and strength of the parasiticides are also to be determined by the seat and stage of the disease. For its circinate forms either washes or ointments may be used indifferently, on account of the superficial growth of the plant, but when the scalp or beard is affected an ointment is to be preferred on account of the more ready penetration of the agents employed in this form to the deeper portions of the skin. A long list of articles might be named which have a greater or less destructive power over the fungus, among the most active of which are sulphur and sulphurous acid, creasote and carbolic acid, the bichloride and nitrate of mercury. Their action may often be combined with advantage.

Recently a substance called Goa powder has been used in this and other cryptogamic growths upon the skin. This material, from a South American plant, imported into India from Bahia, where its antiparasitic reputation was established mainly in the cure of Burmese ringworm, owes its active properties to the large amount of chrysophanic acid it contains. It may be applied by moistening the parts with water and rubbing in the powder daily; by making it into a paste with water or vinegar, and applying it in the same way; or the chrysophanic acid obtained from it or from other sources may be directly used upon the affected parts in ointment or other form. In all such ways it discolors the skin, and sometimes excites an excessive degree of inflammation of its tissues. In the superficial circinate stages, as you have seen, it is

an efficient agent, but in the deeper-seated varieties upon hairy parts the powder probably would be ineffective. The acid, however, in the form of an ointment (grs. xv., lard ʒi.), by penetrating more deeply might eventually work a cure.

For the ordinary superficial circinate forms a solution or ointment of corrosive sublimate (grs. ij. to ʒi.), if the surface affected be not too extensive, may be applied twice a day as freely as the skin will allow without overstimulation. Upon the face and parts exposed to view these may be used to advantage, because they do not discolor the skin. Sulphurous or carbolic acid in solution may also be applied with success, though less certain in their action. They should all be used much longer than the appearances seem to require. When the disease affects the beard or scalp, and has already invaded the hairs, our remedies must be used for a long time, and in connection with epilation. I generally advise some such course as follows: at night an ointment made up in varying, but substantially these proportions — hydrarg. am. chlor. ʒi. (or ung. hydrarg. nit. ʒi.), creasote gtt. xv., sulph. flor. ʒss. , lard or cosmolin ʒi. — is rubbed thoroughly into and a little beyond the affected districts. In the morning this is washed off with soap, with soft soap if well borne, and epilation is then performed. Immediately afterwards the officinal solution of sulphurous acid is sopped freely over the parts, which are then left to themselves for the day. The face will not stand as rough treatment as the scalp, and we are often obliged to use soothing applications, as zinc or diachylon ointment, by day to counteract the over-activity of the nocturnal remedies. Beware of any so-called quick cures; they are impossible. Sure results are to be attained only by the long-continued use of the most active remedies thoroughly applied. Even by such use of them, and long after we have tired out the faith and endurance of patients and attendants, relapses will often occur when treatment is given up, because we have left undestroyed in the deep recesses of some hair follicle a single spore of the many millions we first attacked. Never be persuaded, therefore, by a mother's or patient's importunities to consent to a premature relinquishment of your course, or fail to state, before beginning, the probable length of the cure.

Of internal treatment nothing need be said, as none is ever required, or is of any direct influence upon the destruction of the parasite. It is demanded only when the effects of the latter upon the cutaneous tissues show that the system needs such attention.

In this case the kitten shall be destroyed, to prevent farther mischief, although the disease upon animals may be cured in the same ways as upon man.

The clothing worn next the parts affected should be soaked in boiling water or destroyed, as in all cases of the disease, and the brushes, combs, and other articles which have come in contact with the diseased skin should be treated in the same manner.

A CASE OF UTERINE FIBROIDS.

BY ISAAC F. GALLOUPE, M. D., LYNN.

MRS. ISABELLA S., fifty years of age, mother of two children, the youngest of whom is nineteen years old, called me in the early part of last June on account of profuse uterine hæmorrhage, occurring at a menstrual period; to indicate the extent of the bleeding a number of large coagula were shown me, together with several napkins saturated with blood. On digital examination the cervix and os uteri were found to be normal both as regards size and position. A long, stringy clot, however, was hanging from the os into the vagina. She had been confined to her bed several days on account of weakness from loss of blood. Her skin was blanched, lips pale, and muscles flaccid; she was emaciated and very nervous. There was no enlargement of the uterus apparent, but there was great tenderness, especially in the right ovarian region. For several years the menstrual period had been prolonged, and hæmorrhage had occurred at irregular intervals. There had been at all times great tenderness on pressure in the right ovarian region, but at the approach of and during each menstrual period the pain became severe and paroxysmal in character; it came on suddenly upon leaving the bed in the morning; she was generally obliged to resume the horizontal posture, and it was only after several attempts that she was able to get up. Paroxysms of pain would seize her many times during the day, compelling her to lie down and apply remedies. Hot applications generally soon subdued the pain.

Simultaneously with the commencement of menorrhagia there occurred another symptom which, so far as my knowledge extends, is unique as dependent on uterine irritation. Two or three days before the appearance of the menses the skin of the lower extremities became cold, and a pricking and itching commenced and rapidly increased until the whole cutaneous surface became affected with violent itching that continued, with intervals of relief, until the second day after the establishment of the menstrual flow, when this symptom would disappear. As time passed the pruritus increased in severity and duration until it became nearly continuous, rendering the patient's life one of great torment from which there were but few periods of relief. It was noticed that the occurrence of a storm would invariably usher in a paroxysm, and so sensitive to dampness did the skin become that wiping it with a damp towel would cause agony, and at last the approach of a storm, the existence of a fog, and even a heavy dew, coming on while she was asleep in bed, protected by closed windows and woolen blankets, would cause a visit from her tormentor; during dog-days her discomfort was without intermission. Worn down by intense suffering and loss of blood, she would go to bed at night, tired out, and sink into a sound sleep;

in about an hour her sleep would be disturbed; by degrees she would become conscious that her enemy was at work; she would toss about the bed in agony, then spring to the floor, rub herself violently with both hands, fly from room to room, beside herself, and at last, after two or three hours' suffering, sink exhausted upon the bed and fall asleep. She has declared to me over and over again that her life was a burden, and that she would be glad to be relieved from this curse at any cost, even of life itself.

Her skin was at all times free from eruption, and had no other abnormal tendency except coldness.

Several eminent physicians had been consulted, and many remedies both internal and external used without benefit; indeed, the latter never failed to aggravate the suffering, involving, as most of them did, the application of moisture to the skin. A hypodermic injection of morphia was once tried; it relieved the itching in about two minutes, but vomiting was induced, and continued all day, greatly exhausting the strength.

On the 16th of August my services were again required. She had been flowing profusely for three days, and had, during that time, suffered much from constant pain in the hypogastric region, with frequent exacerbations like (as she said) labor pains. She was very weak and despondent; her skin was anæmic and dry; pulse 120 and feeble. She was advised to take half a drachm of fluid extract of ergot once in two hours, to apply iced water to the hypogastrium to check the bleeding, and a suppository of morphia and belladonna was used to ease the pain. On the next morning, the symptoms not having abated, a digital examination was made, when the cervix was found to be obliterated, the os dilated and occupied by a protrusion the size of a large orange, evidently a fibrous tumor. The use of ergot and the suppositories was continued, and a tampon applied wetted with Monsel's styptic. On the day following, after etherizing the patient and removing the plug, the tumor (it being then partially in the vagina) was seized by the fingers, and by dragging, torsion, and diligent use of the finger nails applied to the pedicle was severed and removed. It was smooth, lobulated, about the size of the fist, and weighed six ounces. There was no hæmorrhage, but the patient suffered considerably from shock. For the first time in the history of the case, there appeared a copious watery discharge; it was foetid, but not of a putrid odor, and was rendered odorless by a few injections of bromo-chloralum.

The pain ceased and she gained strength for three or four days, and was congratulated upon her delivery at last from her distressing and dangerous ailment. At the end of five days, however, the pain returned with great severity, accompanied by hæmorrhage. On examination the os was found to be dilated and filled by a smooth body the same as

before. Ergot was again given, and on the 27th of August another tumor was removed in the same way as the first one; it was more dense and fibrous than the previous one, the end of the pedicle remaining in the uterus, feeling hard like the end of a walking-stick; it weighed four and a half ounces.

Pain, loss of blood, and intense nervous excitement combined to bring the patient to a very low condition. About two hours after the last operation she had a severe rigor that continued two hours, notwithstanding the prompt and thorough application of external heat and the use of hot brandy and water internally; her pulse was scarcely perceptible, and could hardly be counted; countenance pale and sunken. When reaction came on it was proportionately severe, with flushed face, headache, and a temperature of 105° F. A highly febrile condition continued three or four days without, however, any local symptoms, when she began to convalesce. She continued gradually to improve, but was not strong enough to leave the bed until after two weeks had passed. Neither the pain nor hæmorrhage returned, and the pruritus has ceased to claim much attention; at the end of four weeks her health was better than it had been for several years previously.

On the 27th of September the menses returned, and were perfectly normal for four days, when fresh blood and small coagula appeared; moderate bleeding continued until the 18th of October, when it was stopped by a single injection of half a drachm of Monsel's styptic in three times as much water. Doubtless this hæmorrhage was due to the fact that the patient took much active exercise, and rode from six to twelve miles daily during and after the menstrual period. On the 30th of October, and regularly since then, the menses returned and departed in a perfectly normal manner.

This case illustrates many points of interest in the development and termination of uterine fibrous tumors, notably the benign and partially successful efforts of nature for their removal. The pruritus was remarkable both on account of its severity and its remote and exciting causes.

OCCLUSION OF THE VAGINA, WITH RETAINED MENSES, OF FIFTEEN MONTHS' STANDING.

BY GEO. A. JORDAN, M. D., WORCESTER.

Mrs. B., aged twenty-eight, married eight years, with no hereditary predisposition to disease; has borne two children, three and six years of age, respectively. She had enjoyed good health until the birth of her second child, when severe post-partum hæmorrhage occurred, lasting some weeks, producing extreme prostration, with paralysis of the lower extremities. This condition remained five or six months, when

she gradually regained strength and the use of her limbs. She was then informed by her medical attendant that there was "extensive ulceration of the womb," and he treated her, she said, with caustics. About this time the catamenia appeared once, after which pelvic pain recurred regularly every four weeks, lasting from seven to twelve days. During one of these attacks I was called, and found the patient emaciated and anæmic, with severe pain in the back, loins, and pelvis. The skin was bathed in profuse perspiration, the tongue coated dark-brown, and the bowels were constipated. A tumor, the size of a child's head at term, could be felt above the pubic arch through the very thin abdominal walls; by pressing the fingers down between this and the pubes, a constriction could easily be distinguished, corresponding with the cervix uteri at the fourth month of gestation. Per vaginam the finger could pass about two inches only, when firm resistance was met; in all directions the same tense, smooth surface was felt, except a small roughened or elevated spot corresponding in position with, and at first thought to be the os.

After building up the general health of the patient, an aspirator, with a very small needle, was used to test the contents, which proved the diagnosis to be correct by the discharge of a dark, chocolate-colored liquid; feeling sure that we had a case of retained menses, a trocar was introduced, care being used to follow the axis of the utero-vaginal canal. On removing the trocar some eight ounces of this dark grumous fluid escaped. Wishing the evacuation to be gradual, no force was used, but after removing the canula and placing the patient comfortably in bed I left her, expecting to use the probe or to enlarge the opening at my next visit, but within an hour uterine contractions commenced, expelling large quantities (about two quarts) of the same fluid, which gradually assumed a more watery consistency. The patient became very much prostrated, but responded kindly to the active use of tonics and stimulants. At this time the distance from the artificial opening to the fundus was four and a half inches. The discharge gradually grew less, but with a decidedly fœtid odor, until the third day, when the temperature stood 104° F., pulse 146, with frequent chills. In the next three days, under the use of disinfecting injections with active stimulation, the temperature fell to 100° F., pulse 100, without any disagreeable symptoms except slight pain in the pelvic region. She was able to sit up two or three hours a day without fatigue, and said she felt quite comfortable.

June 25th, ten days after the operation, the signs of peritonitis suddenly developed, with profuse diarrhœa. Active treatment was persevered in with apparently beneficial results, as the violent symptoms subsided, and the general condition seemed to improve until the 28th at eight o'clock P. M., when vomiting of stercoraceous matter com-

menced, lasting three hours before it was controlled. She did not rally from the great prostration following, but died at eight o'clock the next morning.

Post-mortem examination eight hours later showed general peritonitis and pelvic cellulitis. The peritoneal cavity contained some two quarts, and the pelvic some ounces of fluid. The uterus was very much enlarged and its walls were thickened uniformly in all parts, the lining membrane being discolored by recent contents. The ovaries and Fallopian tubes were healthy or but slightly congested.

The occlusion was found to be in the vagina about two inches from its uterine extremity. The posterior uterine surface was firmly bound down by adhesions, upon removing which many small collections of pus were found, the result of inflammation that was not suspected in life.

The fact that menstruation had never returned but once after confinement, and then to be followed regularly every four weeks by all its symptoms but the "show;" her treatment at the time; the position of the occlusion, which, being vaginal, did not at first receive the full force of the uterine contractions, thereby preventing rupture of the recently united surface, until they had gained sufficient strength to resist the increasing mass, and the exclusion of other probable causes, such as syphilis, criminal abortion, etc., lead me to suggest the use of caustics as the cause of this case of vaginal occlusion.

RECENT PROGRESS IN THE TREATMENT OF THORACIC DISEASES.

BY F. I. KNIGHT, M. D.

Acute Primary Œdema of the Lungs, rapidly Fatal.—Whilst Œdema of the lungs as a secondary complication of various diseases is an every-day occurrence, as a primary affection it is extremely rare. Cases are reported now and then, especially in old people. The following case¹ occurred in a young man, a waiter, twenty-five years old, and was fatal in a few hours. He was brought to the hospital at half past three o'clock in the afternoon suffering much dyspnoea. He was perfectly conscious, and stated positively that up to the morning of the same day he had been in perfect health. He had attended to his duties the day before and up to two o'clock in the morning of the day he became sick. He did not feel that he had taken cold or strained himself. The room had not been very full of tobacco smoke, nor had he drunk an unusual quantity of beer or liquor. He got up well in the morning, and went into the restaurant. About eight o'clock he fainted,

¹ Strümpell, *Archiv der Heilkunde*, 2 Heft, 1877.

without known cause, and had to be carried to his room. He soon recovered from this, but complained of severe dyspnœa, and was withal so weak that he was sent to the hospital.

He was of medium size, and pretty well nourished. There was marked cyanosis of the skin and visible mucous membranes, and accelerated, labored respiration. There was no dullness on percussion over the lungs, but on both sides, front and back, moist râles could be heard on auscultation. Nothing abnormal was noticeable on examination of other organs. The temperature was normal; the pulse 116, tolerably full at first. The pupils were equal, rather small, and reacted sluggishly. He complained of great difficulty in breathing and some headache. He vomited once spontaneously, soon after admission. In the course of the next two hours the râles increased, the dyspnœa became more urgent, and the cyanosis more marked. The nose and extremities were cool. About five o'clock his mind became dull; he grew drowsy, and soon comatose. On auscultation of the lungs very numerous, moist, medium-sized râles could be heard everywhere. The pulse became small and very frequent. Just before death a few slight spasms were noticed in the right arm. Death ensued, in spite of emetics, counter-irritants, venesection, and faradization of the respiratory muscles, at six o'clock in the afternoon. The temperature remained normal up to the time of death.

Autopsy on the next day showed a few livid spots, noticeable rigidity. The scalp, skull, and membranes of the brain were very hyperæmic. The brain was tolerably firm, contained a moderate amount of blood, and was not œdematous; nothing abnormal otherwise perceptible in it. The lungs on both sides were filled with blood, and gave out a profuse bloody serum everywhere on section. There was nowhere any infiltration. The heart was strongly contracted, in other respects normal (not fatty). The liver, spleen, and kidneys showed nothing more than excessive hypostatic congestion. The urine taken from the bladder contained no albumen. There was chronic catarrh of the stomach and intestine, and in a few places there were small ecchymoses in the mucous membrane. The other organs showed nothing worthy of mention.

Paracentesis of the Pericardium, with an Analysis of Forty-One Cases. — Dr. John B. Roberts,¹ of Philadelphia, gives an interesting *résumé* of this operation from the earliest times, with the indications for treatment and the general results that may be expected. Riolan first proposed it in 1649, but Romero performed the first successful operation at some time before 1819. Paracentesis is indicated when the effusion is large and threatens to destroy life, ordinary treatment failing to produce absorption. The period that the surgeon must allow

¹ New York Medical Journal, December, 1876. New York Medical Record, January 20, 1877.

to elapse before tapping is as yet undecided. As a method of giving relief in chronic cases it is probably no more open to objections than is excision of the breast or tongue for cancer. The particular method of operating is now tolerably uniform. A small aspirating needle is to be used,—so small that it simply makes a fine puncture that would not harm the lung if that were pierced. The point recommended by Dieulafoy is in the fifth interspace, about three quarters of an inch from the edge of the sternum. In fifteen out of thirty-four cases this point was chosen.

The dangers to be dreaded are wounding of the internal mammary artery, and striking the heart as it is thrown forward in systole. By adopting Dieulafoy's plan the artery is avoided, as it lies from a quarter to half an inch from the edge of the sternum. Injury to the heart may be avoided by having a canula slide over or within the needle, thus guarding its sharp point. The heart may probably, however, bear a certain degree of injury with immunity, according to Eve, Steiner, and others. Baizeau and Roger tapped the ventricle without doing harm, both patients surviving the operation, though in one case one hundred and fifty and in the other two hundred and fifty grammes of blood were drawn. As for the danger of the operation in these forty-one cases, regarding one in which the final result was not given as a fatal case, the mortality was 53.66 per cent. But then the effusion in many of them was merely a single factor of disease; in fact, in seventeen there were other concomitant and often incurable affections. In five fatal cases no other disease was mentioned, which puts the mortality at 12.19 per cent., supposing it to have been from cardiac dropsy alone. Since the year 1850, of the uncomplicated fatal cases the mortality has been 21.43 per cent., which, though not so low as the figures given for all the uncomplicated cases taken together, is perhaps as low as in many other operative procedures that are regarded as perfectly justifiable. In acute rheumatic pericardial effusions the results have been excellent; where, however, the disease becomes chronic a perfect cure is almost hopeless, for, owing to the long continuance of the inflammation, the maceration of the heart, and the pressure of the distended sac, the tissues have assumed new pathological characters.

On the Change of Serous into Purulent Pleuritic Exudations. — Dieulafoy¹ denies that serous exudations become purulent in consequence of puncture, and believes furthermore that in case an effusion appears serous on the first puncture and purulent on the second, it really had the latter quality in the beginning. Observation of twenty-two cases has taught him that there is no pleuritic exudation so simple that it does not contain at least twelve hundred red blood corpuscles to the

¹ Gazette hebdomadaire, 32, 1877. Centralblatt für die medicinischen Wissenschaften, 42, 1877.

cubic millimetre of fluid, and that frequently the number is forty-five hundred or more without their giving the fluid a reddish tint. These are the exudations which seem quite clear on the first puncture, and subsequently become purulent. Attention is called here to the analogy between pleurisy and pneumonia. There is a stage of engorgement in which the red corpuscles prevail; then these proportionately diminish whilst the white corpuscles increase enormously, a condition which would correspond to the stage of gray hepatization in pneumonia. As little as every pneumonia passes into this stage, so little does every pleurisy become purulent. How long the stage of engorgement in pleurisy lasts cannot, in the manifold presentation of the disease, be determined even approximately. These "histologic" hæmorrhagic exudations, which do not appear bloody to the unaided eye, differ materially in their course from those markedly hæmorrhagic effusions which occur after injuries and in tuberculosis and cancer, and have no tendency to become purulent.

Hæmoptysis; Subcutaneous Injection of Ergotine. — Jos. Hirschfeld¹ says that among the therapeutic measures used against hæmoptysis cold deserves some recognition, as it, by reflex action, produces constriction of the vessels and diminution of their calibre, and so facilitates the formation of thrombi. The internal use of ice is to be preferred to the external application of cold. Any therapeutic procedure against hæmoptysis is essentially aided by deep inspirations (recommended by Niemeyer), provided the hæmoptysis does not come from a cavity. The expansive force of air breathed in and held in the lungs as long as possible exercises, evidently, a pressure on the walls of the vessels and on the gaping wound. The forced inhalation of astringents has not answered expectation. Styptics, such as alum, lead, tannin, chloride of iron, etc., taken internally effect but little, and often disturb digestion. Of the narcotics, digitalis deserves special consideration, as it will show a beneficial although not a rapid action when the heart is excited, and especially when an uncompensated affection of the heart is the cause of the hæmoptysis.

The sovereign remedy against hæmoptysis is ergotine, which, as is well known, excites the vaso-constrictors. A solution in glycerine (1:10) is better than a solution in water, as after long standing it shows but little sediment and no fungi. After the injection the spot injected becomes very sensitive, with some heat, followed by redness, which disappears in eight or ten hours. If the patient is much excited or has much cough the author is accustomed to precede the ergotine injection with one of morphia, or to give them both at once but in different places. In this way, the patient becoming quiet in mind and body, the ergotine has a better chance to act.

¹ Wiener medizinische Presse, No. 22, 1877.

Respiratory Changes in the Pulse; Pulsus Paradoxus. — [Franz Riegel.¹] Griesinger, in the year 1856, first reported a case in which the pulse became weaker or disappeared with every inspiration. On autopsy a fibrino-purulent mediastinitis was found. The inspiratory weakening of the pulse was here produced by the action of the expanding thorax on the adherent aorta. Two analogous cases were afterwards (1873) reported by Kussmaul, who, on the strength of Griesinger's observation, diagnosed fibrous mediastino-pericarditis, and the autopsies confirmed his diagnosis. Kussmaul gave several pulse tracings of his patients, which showed very clearly the inspiratory weakening of the pulse, and he proposed for this variety of pulse the term *pulsus paradoxus*, now in general use. Only two other cases have been reported, one by Bäumlér and one by Traube, in which, however, no change in the mediastinum, but a large pericardial exudation was found. Traube, however, did not attribute the peculiarity of the pulse in his case to this, but to great thickening of the pericardium. Riegel had two cases, in one of which he felt sure there was neither mediastinitis, pericardial effusion, nor, considering the short duration of the affection, much thickening of the pericardium. He afterwards examined more than seven hundred sphygmographic tracings, and in all of them found (1) a relative inspiratory weakening (*pulsus paradoxus*), (2) a relative inspiratory rapidity of the pulse, and (3) an inspiratory increase and lowering of the impulse. These changes were especially marked when the inspirations were deep. The patients were usually between fifteen and twenty-five years of age, and most of them convalescents, who were perhaps still a little weak, but certainly had none of the affections supposed to be necessary to produce such changes in the pulse. These phenomena are attributed by Riegel simply to the well-known diminution of blood pressure within the thorax with inspiration, and increase of it with expiration. Although these records show that every case of *pulsus paradoxus* does not signify fibrous mediastino-pericarditis, the author does not undervalue the cases of Griesinger and others, referred to above, but thinks attention should be paid to other characters of this pulse as indicated; evidently a pronounced form of *pulsus paradoxus*, with almost complete disappearance on inspiration, will never be confounded with these physiological occurrences.

Systolic Retraction of the Intercoastal Spaces. — Von Widmann² writes that while, undoubtedly, systolic retraction of the intercoastal spaces has been often noticed when there were partial or complete adhesions of the heart and pericardium, with the pericardial pleura, to the costal pleura, it is also equally certain that these latter have in some cases been absent, and further, that, when present, retraction of the

¹ Berl. klin. Woch., No. 26, 1876. Allg. med. Central-Zeitung, 43, 1877.

² Virchow's Archiv, July, 1877. London Medical Record, November 15, 1877.

intercostal spaces has not always been observed. He regards as most important for the explanation of these phenomena the change in the axis of the heart's longest diameter during systole, namely, the shortening of the right-to-left diameter. He says the systolic retraction proves only (basing ourselves on the results of physiological investigations of the changes of shape and position which occur in the organ during systole) that the heart lies in an anomalous position, and chiefly that it is twisted so as to lie, instead of with its inferior surface forwards, with one of its lateral surfaces towards the thoracic wall, or, in other words, that it may turn round on its long axis, in which position it may or may not be fixed by adhesions. During systole the heart undergoes a diminution of its right-to-left diameter; if, now, one of these sides be in contact with the thoracic wall, it will be withdrawn during systole, and in consequence the atmospheric pressure will force in the intercostal spaces. But in spite of this twisting of the heart, these consequences may be prevented by emphysema of the lungs, collections of air in the pleural sac, or, if the heart be not hypertrophied, when its movements are very feeble or the intercostal spaces narrow and the thorax very unyielding, etc.; that is, when the forming elements, retraction of the left lung, hypertrophy of the heart, strong cardiac movements, etc., are absent.

Diagnosis of Extra-Pericardial Adhesions. — Riegel¹ points out what he considers an interesting diagnostic sign of adhesions between the pericardium and the border of one or both lungs: this is enfeeblement of the heart's impulse during expiration. He says that much attention has been paid to the influence of the respiratory phenomena upon the pulse and the tension of the arteries, but little to their influence upon the cardiac movements themselves; but it is easy to observe that under normal conditions the impulse is stronger during expiration and feebler during inspiration, which is easily accounted for by the changes in the position of the diaphragm and the anterior border of the lungs. But when adhesions have taken place between the pericardium and the edge of a lung, the reverse of the above occurs, as the lung on retraction pulls upon the pericardium and impedes the heart. He demonstrates this by cardiographic tracings of the apex beat in two of his cases, where after death these adhesions were found.

Fracture of a Rib by Cough. — Gillette² reports a case. The patient was a painter, suffering from advanced tuberculosis of the lungs. During a fit of coughing he completely fractured the eleventh rib on the left, without special subjective symptoms. Autopsy confirmed the diagnosis. Whilst collecting the examples of fracture by severe muscular exertion, Gillette calls attention to the fact that the ætiology of these spontaneous fractures is closely associated with the constitutional affec-

¹ Berl. klin. Woch., November 5, 1877. London Medical Record, January 15, 1878.

² L'Union médicale, 75, 1876. Allg. med. Central-Zeitung, 43, 1877.

tions of the individuals (syphilis, scrofula, etc.). The author, as a hitherto unmentioned cause, proposes lead poisoning, and reports the case of a house painter, who was accustomed to use lead, who, during his life, had suffered eighteen fractures.

Strain of the Heart. — Since the articles of Albutt and Treadwell¹ appeared, communications have been made upon this subject by Seitz and others. Münzinger² found heart disease very common among the Tübingen peasants who work in the vineyards, and fifty autopsies showed that pulmonary emphysema, shrinking and pleuritic adhesions, were present in unusual number, together with changes in the heart. He attributes this to the fact that men and women from their youth up are obliged to carry heavy burdens on their backs, and while doing this have insufficient food.

Münzinger, after a thorough consideration of the work done by the heart and lungs of one climbing with a load on his back, comes to the conclusion that the heart and lungs are affected simultaneously, emphysema, for example, not appearing first, and hypertrophy afterward, as a consequence of it, but emphysema and hypertrophy developing together. The symptoms do not entirely correspond with those of ordinary valvular disease. Relative insufficiency predominates, and weakness of the heart's action is constant. In one class of cases an abnormal number of inefficient systoles follow one another; in another class more numerous, several strong contractions are followed by a preponderating number of weaker ones (*delirium cordis* of the French). It is astonishing how much work can be done at times by subjects of the latter class in spite of the weakness of the heart. Murmurs are not constant in either class. The fatal result comes by increasing debility, always accompanied by symptoms of pulmonary congestion. The temporary capacity for work spoken of above cannot be accounted for by any change in the muscular organization, but must be sought in the nervous system. Professor Jürgensen adds to this article the remark that he never saw such affections in the lowlands.

Obliteration of the Pleural Cavities and Loss of Lung Elasticity as a Cause of Hypertrophy of the Heart. — Bäumler³ calls attention to the importance of the elasticity of the lung as an aid to the heart's action, especially that of the right ventricle. A disturbance of the retractile force of the lungs must increase the work of the heart, and hence conduce to hypertrophy. Bäumler and his pupil Brudi have observed several cases in which the hypertrophy of the heart could be referred only to pleuritic adhesions. In the first case there was found complete obliteration of both pleural cavities, and hypertrophy of both ventricles

¹ JOURNAL, September 5 and 12, 1872.

² Deutsches Archiv für klinische Medicin, xix., 5 u. 6. Deutsche med. Woch., 36, 1877.

³ Deutsches Archiv für klin. Med., xix., Heft 5 u. 6. Deutsche med. Woch., 36, 1877.

without valvular disease ; two other cases were similar, only dilatation and hypertrophy of the right side of the heart predominated. From the above it is evident that pleuritic adhesions must be borne in mind as a possible cause of obstruction to the pulmonary circulation. Bäumer considers that the recognition of these adhesions is often difficult, as, even when of considerable extent, they may diminish the mobility of the edge of the lungs but little.

In convalescence from pleuritic affections the author recommends that the recovery of lung elasticity be promoted by residence in high altitudes, if this is possible ; if not, by gymnastics, compressed air, etc.

(To be concluded.)

NEW YORK PATHOLOGICAL SOCIETY.¹

THE second volume of the transactions of this society calls further attention to the wealth of material which its members have accumulated. It also elicits well-deserved praise, not only for the evidence it presents of the active interest taken by the fellows, but also for the unusual energy and promptness displayed by the committee on publication and by the editor.

The preceding volume was devoted to a consideration of affections of the nervous system and of the organs of respiration and circulation. In the present one the records of specimens relating to diseases of the intestinal canal, peritonæum, pancreas, and liver are presented in a form which will make them permanently and generally useful.

The table of contents includes among the two hundred and eight cases of intestinal disease many of obstruction from without and from within, of perforation, inflammation, and malformation. The list contains some of the more common affections, such as are likely to occur within the experience of any practitioner, and others so rare that only occasional instances arise during a long period of years in a densely populated centre.

An appeal is made to all interested in the objects of this society for assistance in the disposal of the two volumes now printed. As these are offered at a very low price, and as the early issue of a third volume is solely dependent upon the sale of its predecessors, it is certainly to be hoped that an appreciating profession will do its part in encouraging the good work now being performed by the New York Pathological Society.

THE MISSISSIPPI BOARD OF HEALTH.²

Of the sixteen state boards of health, twelve have published reports. The last has just come from Mississippi, and contains a large amount of interesting matter. Three members of their board are appointed from the State

¹ *Transactions of the New York Pathological Society.* Vol II. Edited by JOHN C. PETERS, M. D. 1877. Pp. 291.

² *First Annual Report of the State Board of Health.* DR. WIRT JOHNSTON, Secretary. 1877. Pp. 187.

at large by the governor; two from each of the six congressional districts are also appointed by him on the nomination of the State Medical Society, and they are the sanitary commissioners, each for his own part of the State. These fifteen physicians generously serve the public without even the payment of their traveling expenses. They have not yet the advantage of a system of registration of vital statistics, but have made the deficiency in that respect and the want of local boards of health less important, from the fact that their members represent and report on the health of the various parts of the State.

The increase of syphilis, pulmonary consumption, and drunkenness among the blacks is generally noted, while their ignorance, as in the Southern States generally, prevents proper attention to vaccination, and consequently small-pox is more or less ever present with them. One reporter states that seventy-five per cent. of the negroes returning from the war brought syphilis with them. Their death-rate is about double that of the whites, and their infant mortality is simply frightful. Among the better classes, diseases of the nervous system have enormously increased, attributable to the trying events of the war and its consequences.

In the eastern part of the State one half the sickness treated is said to be of malarial origin, especially in the swamps and wet lands, or in their immediate vicinity; for the medical opinion is that the malaria clings to the earth and does not travel more than half a mile from its source. Sleeping in the top stories of houses, a retreat to the high lands, or planting a belt of trees, to be a mechanical barrier, are recommended as a protection often efficient; the use of alcohol is not advised. Heavy rains followed by heat are given as the sole special immediate indications of severe epidemics of ague. The type and frequency of the disease have much changed since better draining of the land. Cholera and typhoid fever are rare, the water supply being almost never from surface-wells but from cisterns and deep-driven wells. Diphtheria and cerebro-spinal meningitis have occurred, a few cases, not severe, now and then, generally in persons broken down from malarial disease. Pneumonia, especially of a low type, is common. Pulmonary consumption and rheumatism, although there is much moisture of the soil, are reported as rare among the whites, common among the blacks. Diarrhoeal diseases are given a place neither high nor low.

The above account appears to apply pretty well to the State, as a whole, so far as the reports go, except that where surface-wells are used typhoid fever is not uncommon; that on the Mississippi River the levees appear to prevent the proper drainage of the land and so cause malarial fever; that on the gulf coast cholera and oftener yellow fever occur, of which, however, very little is said; and that diphtheria, with a mortality of fifty per cent. of the cases attacked, has appeared here and there.

A form of anæmia peculiar to the South is reported to be common in the salubrious regions of the pine woods, and is thought to be due to an exclusively vegetable diet. The patients are pale, extremely debilitated, with dyspnoea and palpitation; the anæmia-souffle is heard throughout the chest, front and back. The same form of disease is found in the low regions, where it is thought to be due chiefly to continued exposure to malarious influences. The strange habit, so difficult to cure, of eating dirt is associated with the malady in the pine woods.

PRESCRIPTION WRITING.¹

It is somewhat singular, in view of the importance attaching, either in fact or in the estimation of the laity, to a prescription, that care is not taken to make this little document more neat and orderly than is often done.

Recognizing the fact that a slovenly and highly abbreviated prescription is quite as likely to be the offspring of ignorance as of want of time, Dr. Gerrish has arranged a small part of the Latin grammar as an assistance for those whose knowledge of the universal language is limited.

Even in the strictly grammatical part of the book we think there are many whose Latin is rusty enough to find some points worth their notice; but this portion is preceded by a very practical chapter of rules for writing prescriptions, giving instructions which students are constantly asking for, and which many practitioners might with advantage heed. This chapter makes no pretense of instructing either in *materia medica* or therapeutics, but merely states in a clear and sensible manner the surest and neatest way of conveying to the apothecary and the patient the directions of the physician, with the least chance of mistake.

With nothing but approval of what he has written, we hope Dr. Gerrish, in preparing the second edition of his little book, which is likely to be soon called for, will reflect that as "it [Latin] is the only language in which it is practicable to write the international pharmacopœia," so the only system of weights and measures in which it is practicable to prepare this desirable work is the *metric*, and that he will thus lend his aid to a good cause.

To those for whom it is intended we heartily commend it, and strongly suspect that the apothecaries would be very grateful if all its precepts were heeded by older men, even if somewhat familiar with a language which, as Mr. Parrish puts it, it is just as well to recognize is not precisely the same as the tongue of Cicero and Virgil.

WHEELER'S ORGANIC CHEMISTRY.²

This little work pretends to give simply the outlines of organic chemistry. The most familiar and important organic compounds are treated very briefly and concisely, and but little of theory is given for the reason, as the author states in his preface, that the reader is expected to be familiar with modern inorganic chemistry and the theory of chemistry in general. We do not find anything in the book which is not treated equally well in many of the text-books on general chemistry.

The book is of no special value to the physician or medical student, since

¹ *Prescription Writing, designed for the Use of Medical Students who have never studied Latin.* By FREDERICK HENRY GERRISH, M. D., Professor of *Materia Medica* and Therapeutics in the Medical School of Maine. Portland, Me.: Loring, Short, and Harmon. Boston: James Campbell. 1878.

² *Outlines of Modern Chemistry, Organic, based in Part upon Richel's Manuel de Chimie.* By C. GILBERT WHEELER, Professor of Chemistry in the University of Chicago. New York and Chicago: A. S. Barnes & Co. 1877.

those substances of importance to the medical profession are treated much more fully and practically in works which are always accessible to the physician. For example, the chemistry of urea, uric acid, hippuric acid, etc., may be learned much better from the ordinary works on the urine and urinary diseases, and that of the vegetable alkaloids and active principles from works on materia medica and therapeutics. W.

"DOGS AND HYDROPHOBIA."

THE committee on agriculture at the State House commenced last week a hearing on the petition of fifty-four citizens of the town of Granby, asking an annual tax of ten dollars on every male dog, twenty dollars on every female dog, and that every dog owner be required to give bonds with good surety to pay all damage. This petition and hearing called forth, in a late issue of the *Daily Advertiser*, a letter under the above heading. The temporary agitation of the citizens of the town of Granby probably exaggerates their estimate of the amount of protection necessary against dogs; but if such exaggerations arise, as is natural, let them be met and moderated by quiet reasoning and well-established facts. A man who thinks himself in danger of hydrophobia is not disposed to appreciate sentiment about the "friend who never deserts us in time of trouble," nor is the "presumption that the Almighty created dogs for some useful purpose" of much consolation to him, even though he be persuaded that a variety of distinct creations was indulged in.

As friends of man as well as of the lower animals, let us have all the reliable facts bearing upon this question which we can command, and calm unpartisan deductions drawn from them, but do not let loyalty to our sentiments or theories induce us to maltreat facts. There is no truth whatever that deprivation of the gratification of the sexual instinct is a cause of rabies; the best observations disprove it. There is not satisfactory proof that disparity of the sexes in numbers, and consequent contests for the female, is the cause of rabies; some observations tend to show that this may be a cause. Rabies does occur, and not unfrequently, in animals in the wild state, and "in countries where dogs abound (male and female)." Constantinople has several times been the seat of epidemics, in Algeria it is common, and it occurs in Egypt.

Rabies, more particularly of the so-called "dumb" variety, does exist in this neighborhood. It is stated that "in Massachusetts during the ten years ending with 1875, only three deaths were reported from hydrophobia." Why stop short of the year 1876, in which alone four deaths were reported? Mr. Youatt does not state "that he has cured a very large proportion of the cases of 'hydrophobia' submitted to his care," nor is our friend loyal to facts when he tells the public "that it is stated by the highest medical authority that comparatively few (some say not more than one in twenty or thirty) when bitten by a mad dog will take the disease." John Hunter used to say "not more than one in twenty or thirty," a statement rejected by all authorities since the introduction of careful registration and compilation of statistics. The psychical manifestations of disease in the dog, as in man, vary somewhat with the indi-

vidual animal; much good may be done by the distribution of the paper published by the State Board of Health, but all dog owners are not intelligent, and the very earliest symptoms of rabies are not always sure to attract attention, or to be clear even to the practiced observer, as Youatt himself acknowledges.

In regard to preventive legislation we will allow ourselves two quotations from Fleming,¹ whose work is so justly admired by the author of the letter referred to. In his preface he says, "The legislative measures suggested for adoption may appear to some lovers of the dog as unnecessarily severe, and inimical to the comfort of the animal; but any one who has had experience of rabies in man or the lower creatures will, I feel certain, agree with me that severity is absolutely necessary if the terrors of a terrible disorder are to be averted. I yield to no one in my admiration of and regard for the most faithful and affectionate animal man has domesticated, and I am convinced that the enforcement of these measures will not only benefit it, but will also spare its companions, human and otherwise, much serious risk and annoyance, pain, disease, and death." And again, in the remarks on the tax upon dogs, page 357, we find, "We have no reason, however, to come to any other conclusion than that a measure of this kind must be most efficacious in ridding the country that energetically resorts to it of a vast number of miserable and dangerous brutes; but to be really efficient the tax should be general and high, exception being only made in favor of dogs which are useful or whose services can be proved to be absolutely necessary."

In conclusion we beg to add our impression that in this community at the present time both the profession and the public are inclined to be skeptical rather than credulous as to the genuineness of any given case of apparent hydrophobia, and the gross appearances at autopsies do not settle cases of true hydrophobia except in a negative way.

MEDICAL NOTES.

— *The Medical News and Library*, quoting our remarks on the services of our former colleague, adds: "In the retirement of Dr. Dwight medical journalism has lost a valuable coadjutor, and our contemporary an editor whose able pen undoubtedly did much to win for it the high esteem with which it is justly regarded."

— The death of Claude Bernard is announced from Paris.

— In England and Wales nearly twenty thousand children succumb yearly to measles and whooping-cough.

— The supreme court of Alabama, as we are told by the *American Reviewer* for January, has pronounced the following opinion: "A physician, like any other person, may be called to testify as an expert in a judicial investigation, whether it be of a civil or criminal nature, without being paid for his testimony as for a professional opinion, and upon refusal to testify is punishable for contempt."

¹ Rabies and Hydrophobia. Their History, Nature, Causes, Symptoms, and Prevention. By George Fleming, F. R. G. S. London: Chapman and Hall. 1872.

— For dispensing muriatic acid instead of peppermint water, to conceal the taste of castor-oil, a Philadelphia apothecary of long standing has been fined five hundred dollars, and imprisoned for six months.

— Dr. Bernhard Cohn (*Berliner klin. Wochenschrift*, October 29, 1877) has made a new application of the Esmarch bandage. By its means he successfully treated a case of phlegmonous inflammation of the foot, one of oedematous inflammation of the fore-arm, and one of white swelling of the knee-joint which had resisted every other form of treatment. The bandage is applied for from fifteen to sixty minutes daily until improvement is manifest. Dr. Cohn thinks the bandage acts chiefly by lessening or relieving the congestion of the part affected. Compression must be perfect, that is, must include both veins and arteries. To avoid needless pain the last turns should not be firmer than is necessary to check the circulation. Some questions in regard to details of the treatment require more experience.

— The same journal mentions the case of a boy who had eczema of the scrotum which was caused by the ova of the oxyuris vermicularis. They were found imbedded in the epidermis. The animal was conveyed to the part on the shirt of the boy, who had the habit of tucking the skirt backward between his thighs.

— *The Boston Gazette and Country Journal* for December 19, 1768, contains the following quaint advertisement:—

WHEREAS MANY PERSONS ARE SO

unfortunate as to lose their Fore-Teeth by Accident and otherways, to their great Detriment, not only in Looks, but speaking both in Public and Private:— This is to inform all such, that they may have them re-placed with artificial Ones, that looks as well as the Natural, & answers the End of Speaking to all Intents, by PAUL REVERE, Goldsmith, near the Head of Dr. Clarke's Wharf, Boston.

. All Persons who have had false Teeth fixt by Mr. John Baker, Surgeon-Dentist, and they have got loose, (as they will in Time) may have them fastened by the above, who learnt the method of fixing them from Mr. Baker.

— By experiments on milk with electricity, Dr. Iles, of Baltimore (*Chemical News*, xxxvi.), is led to the conclusion that during thunder-storms oxygen is converted into ozone, which he thinks is the cause of the rapid souring of milk at such times. The increased acidity is due to the formation of lactic acid, possibly also some acetic acid.

LETTER FROM LONDON.

MR. EDITOR, — To-day's papers give long editorials to the result of last night's meeting of the Convocation of the University of London with regard to the admission of women to its degrees. I have brought from the stalls the *Standard*, *Times*, *News*, and *Oserver*, and hasten to give you a *résumé* of their one-and-a-half-column articles. In addition, each one devotes as much space to the report of the meeting. It is proper to observe that the *Times*, ever conservative, has lately committed itself to that false position, or rather falsely so called, of conservatism which is arrayed against innovation,

while the *Telegram*, representing the antithesis of the political issues of England, has fanned the flame of this inflammatory question of the higher education of women. I forbear to allude further to this journal out of deference to the motives which should guide a correspondent, who, if he err at all, should err first on the side of historical usage, and secondly in the subordination of his personal judgment. My letter will be a mere report of the meeting of last night in Burlington Gardens, Regent Street, and a brief sketch of the journalistic notices of it. You will thus have the popular view of this question before the medical articles reach you in course.

It is necessary to go back some years to obtain a correct understanding of this question in England, though it is worthy of remark that the English medical journals have surfeited their readers with editorials and correspondence upon it for the last twelvemonth. Like the *encores* of low caricature prevalent on the town and provincial stage of England, one has had this subject *ad nauseam*. As long ago as 1868 there was a move in favor of admitting women to degrees in medicine, which was the first form under which higher female education evinced itself. In 1876 Parliament passed the "Russell-Gurney Act," which provided that the "powers of all bodies entitled under the medical act of 1858 to grant qualifications for registration — that is, degrees qualifying persons to be registered as medical practitioners — should be extended to all persons without distinction of sex." Under this act the senate of the university assumed the legal right to open its doors and to offer its diploma to women as to men. The convocation, a governing body corresponding to the board of trustees or regents of an American university, offered three objections: first, that the senate would violate the spirit of the constitution, which contemplated no such fundamental change in the character of the university, which change must be effected by a new charter; secondly, the convocation objected, and most strongly its medical members, on the ground that the senate failed to make any proposals of change in the departments of arts, science, law, and theology, which, as yet, they could not do, either under the constitution or by any special act of Parliament; and the third objection was the possibility that the Russell-Gurney Act would not keep out the enemy from its own midst, — namely, the female graduate; upon this the knights of Chancery Lane and Temple Bar touched lances, and the lawyers were both divided and diverted. While none of the objections were radical, and yet all were of natural suggestion, there arose a demand for female practitioners as well educated as men, and the denial of degrees to them was regarded as unreasonable on the part of a large body of university men not in the senate nor in the convocation. From time to time the senate has made concessions to convocation, but yesterday a supplemental charter came before the latter body, incorporating the claims of the former in plain words, all collateral questions being put aside. Amid great enthusiasm the convocation, by a majority vote of two hundred and forty-two to one hundred and thirty-two, made women eligible to all the degrees of the university on a par with men. The supplemental charter contains a proviso that no female graduate of the university shall be a member of its convocation without a special resolution of admission. The natural course will be that the crown will be petitioned to grant the new charter to the uni-

versity; the official answer may, however, be easily premised, a refusal or a veto of yesterday's vote not being thought of. It is characteristic that all the prominent medical men opposed the charter,— Sir William Jenner with marked feeling. The meeting was called to order by Dr. John Storrar, who briefly stated its object and the issue in case of acceptance of the new charter. The room was crowded and the interest exciting. The proposition to accept the charter was moved by Mr. Bompas in a speech of moderate advocacy. Mr. T. Hensman, in seconding the motion, alluded to the fact that the chancellor of the university (Earl of Granville) and certain members of the senate had candidly stated their desire to admit women, not only to medical but to all degrees of the university, thereby doing away with the exclusiveness which obtained in their earlier movements. His very clever speech closed with an allusion to the catholic object of the university,— namely, to advance learning “amongst all classes of her majesty's subjects without any distinction, and that object could never be fulfilled until the distinction between the sexes was done away with [laughter] in such an institution [applause and laughter].”

Dr. W. Tilbury Fox was the first to oppose the motion, and he did so with considerable vehemence. While he was anxious to promote the acquisition of knowledge among women, he desired a more thorough investigation into the purposes of the new charter. He arraigned the chancellor of the university with a lack of dignity in issuing a circular on the subject, of which the only purpose could be to influence the votes of the evening. At this statement there was a lively buzz of commotion. He had already written, and caused to be printed and distributed, an answer to this circular, impugning the accuracy of the statements of the noble earl.

Mr. Thomas Tyler, M. A., was disposed to caricature the issue, though not opposed in the abstract to admitting women to the university degrees. He stated that ninety-nine out of every one hundred women were opposed to the movement. Said he, “If we are to confer the degree of B. A. upon a woman, would we render her better fitted, for example, to hold the position of a governess?” (This seems to be the highest capacity of woman in the Englishman's mind; I do not ask your readers in general to contrast this with the American conception of female education, but only those who have made themselves personally acquainted with such education in France to push the contrast there.) Mr. Tyler went on to ask, “Would we render her more acceptable to the other sex?” [Laughter.] The “educational hermaphrodite” seemed to be the *bête noir* of the speaker.

Dr. Richard Quain thought the proposition injurious to the institution as a whole, and ruinous to the medical department in particular. He regarded nothing more unfit than the practice by women of the medical profession in its entirety.

Sir William Jenner suggested that the chancellor had descended from his high position to issue an “electioneering circular.” While he would yield to no man in the desire to improve the education of women, he denied that such effect would be produced by obliging them to take the course of study through which it would be necessary for them to pass. He had “but one dear daughter, and he would rather follow her to the grave than see her subjected to such

questions as could not be omitted from a proper examination for a surgical degree." Sir William represents a large and influential public who object to the admission of women to medical practice on the ground that it will "unsex" them. This is a question which the women alone must decide. With it also comes the question of social economy, — the law of supply and demand. If the female patient demands a female doctor, there are no professional grounds why the claims of her modesty should not be listened to. On the other hand, it is highly improbable that all the applicants are to come from the position to which Sir William's daughter belongs. Not every woman has a father whose hands are to be held up in rebuke, or whose head is to be held down for shame. It is to be hoped that a sense of qualification, or necessity, or love for the work, will induce women to enter the Eden whose long-barred gates have been torn open for their entrance.

Professor Lister hoped that graduates of other faculties would not make haste to force upon their medical brethren a measure which he was convinced the majority of them regarded with utter detestation.

Dr. Bucknill provoked a bit of merriment, just before the taking of the vote, by saying that he regarded the higher education of women as mischievous.

The size of the majority vote indicates the dominant thought of the men at the university, while the remarks briefly noted above show the medical gentlemen, some of whose names are familiar to all your readers, to be opposed to the new move. There are reasons to predict that in a decade of years this spirit of opposition will largely recede, and this on account of several reasons. The most prominent medical gentlemen not connected with the schools favor the admission of women to degrees. I take the liberty to quote Mr. Spencer Wells, who, teaching in none of the eleven medical schools of London, but not the less prominent on that account, referred recently to the foolishness of putting stumbling-blocks in the way of medical studies for women. If they wish to study, said he, do not prevent it; stand back, and let them take their chances; for if they will study, you cannot help it. Mr. Berkeley Hill, of University College, is a strong advocate of the movement, while most of his colleagues are not. There is a singular position taken by some gentlemen, namely, that of apparent disinterestedness. One of these, a prominent author in surgery, remarked in private conversation that it was a matter of indifference whether English ladies studied medicine or not. To my observation that they were to be found in Vienna and Paris and in numbers at Zürich, he laughed and said, Well, no one cares anything about that. Why, then, the Czar of Russia takes more interest in the education of his female subjects than the English people in theirs, I remarked, for he has forbidden their going abroad under penalty of loss of residence. It is worthy of note that precisely this feeling obtains in several hospitals in London with regard to Mr. Lister's antiseptic surgery. Even in King's College, where his twenty-four beds are, you may witness the same apparent indifference to its employment. As to the latter, the fight — for it is nothing less than that — is characterized in London by a personal jealousy on the one side and by a firm conviction in a fundamental surgical theory on the other; with both questions success is only a question of

time. And again, it is to be noted that schools on the Continent opened their doors to women and adopted the antiseptic surgery in advance of the English schools. This, in regard to the latter, is the more remarkable, as Mr. Lister is an Englishman, and not, as is usually supposed, a Scotchman.

I will close by adding that about three years ago a "thoroughly respectable" medical school for women was opened in Henrietta Street, Russell Square, and that it now has twenty-five students. Regular lectures are given to the third and fourth year students in surgery, pathology, medicine, and obstetrics, as well as in the specialties, and to the first and second year students in anatomy, physiology, and chemistry. Last year the Royal Free Hospital in Gray's Inn Road was given to this school, the services being under its exclusive control. The faculty is an able one, the names of Mr. F. J. Gant, Mr. Critchett, and Mrs. Elizabeth Garrett Anderson being found on its list. It is under the patronage of several persons of rank, and its executive department is in good hands. The only university in Great Britain which, until now, allowed women to come up for medical examination was Queen's University of Dublin, but it had no power to place the successful candidates on the Medical Register. This is the *sine quâ non* of the British practitioner. It will be understood that the action of yesterday of the University of London grants its degrees to women, and entitles them to registration, so that every difficulty in regard to their practicing medicine and surgery is removed. Yours truly, E. S. P.

LONDON, January 16, 1878.

DR. BENJAMIN HASKELL.

MR. EDITOR, — It is with feelings of deep regret that I announce to you the death of Dr. Benjamin Haskell, of this town, which occurred on the 21st ult. His disease was pneumonia, and of only five days' duration.

Dr. Haskell was born in Rockport. He received his collegiate education at Amherst and his medical at Bowdoin. He first commenced practice in South Boston, remaining there but a short time. He then went to Illinois, but soon returned to his native place, where he remained, in an active practice of nearly forty years duration, up to the time of his death. He was almost sixty-eight years of age, the oldest physician on the Cape, and the longest in practice. He was a man who held original ideas on several subjects, having a peculiar theory as to the physiology of the nervous system.

So great was the grief felt at his decease that a public meeting was held in the town hall on the 22d ult., to give expression to the universal sorrow. Addresses were made by a number of our citizens, all highly eulogizing him and extolling his character as a man and as a physician. Appropriate resolutions were passed, and ordered to be printed in the *Cape Ann Advertiser* and presented to his family.

Dr. Haskell was one of the kindest, most generous, and unselfish men I ever met, extremely conscientious, always doing what he thought was right, and never swerving from his duty, no matter what others might say or do. To the poor he was always kind and gentle, never neglecting the humblest of his patients. He was known, and I have often heard him spoken of, as the "poor man's doctor." His fee was the last thing he thought of. He said to me one day, "I don't practice for money only," and he did not, for he might have been far better off in this world's goods had he been less generous and less unselfish. To the young man struggling along in his own profession he was like a father, as I know from personal experience and observation, always having a word of encouragement and a hand outstretched in time of need, — and who of us has not felt the need of such a friend! "Take him for all in all we shall not look upon his like again," and in many a household here his memory will long be cherished with feelings of grief mingled with gratitude.

Yours very truly,

A. M. TUPPER, M. D.

ROCKPORT, February 2, 1878.

COMPARATIVE MORTALITY-RATES.

	Estimated Population, July 1, 1878.	Deaths during week ending February 2, 1878.	Annual Death-Rates per 1000 living.		
			For the Week.	For the Year 1877.	Mean of ten Years, '68-77.
New York.	1,093,171	513	24.40	24.32	28.71
Philadelphia.	876,118	305	18.10	18.80	21.54
Brooklyn.	549,438	176	16.66	21.51	25.50
Chicago.	460,000	118	13.34	17.83	22.39
Boston.	375,476	118	16.34	20.10	24.34
Providence.	104,500	42	20.89	18.81	19.20
Lowell.	55,798			19.09	22.50
Worcester.	54,937	20	18.94	21.07	22.30
Cambridge.	53,547	16	15.53	18.69	20.83
Fall River.	53,207	23	22.48	21.35	24.96
Lynn.	35,528	9	13.18	20.42	19.67
Springfield.	33,981	5	7.66	16.04	19.77
Salem.	27,140	8	15.33	20.38	21.15

OBITUARY.—We regret to announce the death of Dr. Simeon Tucker, of Stoughton, one of the oldest members of the Massachusetts Medical Society.

At a meeting of the Boston Society for Medical Observation, to be held on Monday evening next at eight o'clock, at its rooms, 36 Temple Place, Dr. Wigglesworth will read a paper upon Faulty Innervation as a Factor in Skin Disease.

BOOKS AND PAMPHLETS RECEIVED.—Cerebral Hyperæmia the Result of Mental Strain or Emotional Disturbance. By William A. Hammond, M. D. New York: G. P. Putnam's Sons. 1878. (A. Williams & Co.)

A Manual of Nursing; prepared for the Training School for Nurses attached to Bellevue Hospital. New York: G. P. Putnam's Sons. 1878. (A. Williams & Co.)

Annual Report of the Massachusetts Charitable Eye and Ear Infirmary for the Year 1877.

Eleventh Annual Report of the Board of Trustees and Officers of the Minnesota Hospital for the Insane to the Governor of the State of Minnesota for the Fiscal Year ending November 30, 1877.

Circular No. 10. Approved Plans and Specifications for Post Hospitals. Surgeon-General's Office, Washington, October 20, 1877.

The Mechanism and Treatment of Pulmonary Complications of Acute Cardiac Disease. By Beverly Robinson, M. D. (Medical Record.)

A Succinct History of the Plan of Treatment of Pott's Disease by Suspension and the Use of Plaster-of-Paris Bandage. By Lewis A. Sayre, M. D. (Richmond Medical Journal.)

On the Treatment of Psoriasis by an Ointment of Chrysophanic Acid, with an Appendix of Comments by various Authors. By Balmano Squire, M. D. Lond., Surgeon to the British Hospital for Diseases of the Skin. London: J. & A. Churchill, New Burlington Street. 1878.

Third Report of the Salem Hospital. Salem, Mass. 1878.

Surgical Uses other than Hæmostatic of the Strong Elastic Bandage. By Henry A. Martin, M. D. (Reprinted from the Transactions of the American Medical Association for 1877.) Boston: James Campbell. 1878.

On the Surgical Treatment of Peri-Typhlitic Abscess. By J. H. Pooley, M. D. Columbus, Ohio.

On the Uses of Wines in Health and Disease. By Francis E. Anstie, M. D., F. R. C. P. (Reprinted from the Practitioner.) London: Macmillan & Co. 1877. (A. Williams & Co.)